Custoffer No. 28880

Confirmation No. 7109

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

 Complete if Known

 Application Number
 10/634,180

 Filing Date
 August 5, 2003

 First Named Inventor
 Bunker, et al

 Art Unit
 1624

 Examiner Name
 Decpak R. Rao

 Attorney Docket Number
 PC25245A

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date  MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 2003/0078276	04-24-2003	Andrianjara, et al	
		US- 2002/0193377	12-19-2002	Andrianjara, et al	
		US- 2003/0144274 ·	07-31-2003	Bunker, et al	
		US-6,008,243	12-28-1999	Bender, et al	
		US- 2002/086890	07-04-2002	Levin, et al	
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		FORE	IGN PATENT DOC	JMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
		WO 02/064080	08-22-2002	Andrianjara, et al		
		WO 02/064572	08-22-2002	Andrianjara, et al		
		WO 03/032999	04-24-2003	Bunker, et al		
		WO 01/63244	08-30-2001	Chen, et al		
		WO 00/09485	02-24-2000	McClure, et al		
		WO 01/12611	02-22-2001	Blagg		

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Substitute for form 1449/PTO		mplete if Known
Substitute for form 1443/FTO	Application Number	10/634,180
INCODMATION DISCLOSUDE	Filing Date	August 5, 2003
INFORMATION DISCLOSURE	First Named Inventor	Bunker, et al
STATEMENT BY APPLICANT	Art Unit	1624
(Use as many sheets as necessary)	Examiner Name	Deepak R. Rao
	Attorney Docket Number	PC25245A

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	<u> </u>	Number-Kind Code <sup>2 (f known)</sup> US-			
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Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
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		WO 02/34726	05-02-2002	Noe, et al		
		WO 02/34753	05-02-2002	Bronk, et al		
		EP 0935963	08-18-1999	McClure, et al		
-		EP 1138680	10-04-2001	Noe		
		WO 99/64400	12-16-1999	Salituro, et al		
		EP 1069110 A	01-17-2001	Kimura, et al		

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Sheet

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Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	T <sup>2</sup>
Initials*	No. <sup>1</sup>	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	-
		International Search Report from PCT/IB 03/03508.	
		Billinghurst, et al. "Comparison of the Degradation of Type II Collagen and Proteoglycan in Nasal and Articular Cartilages Induced by Interleukin-1 and the Selective Inhibition of Type II Collagen Cleavage by Collagenase", Arthritis & Rheumatism, March 2000, vol. 43, No. 3, pp. 664-672.	
		Office Action from 10/264,764 mailed 6.16.03.	
		Moy, et al. "High-resolution Solution Structure of the Catalytic Fragment of Human Collagenase-3 (MMP-13) Complexed with a Hydroxamic Acid Inhibitor", J. mol. Biol., (2000), 302, pp. 671-689.	
		Lovejoy, et al, "Crystal Structures of MMP-1 and -13 reveal the Structural Basis for Selectivity of Collagenase Inhibitors", Nature Structural Biology, Vol. 6, No. 3, March 1999, pp. 217-221.	
		Billinghurst, et al, "Enganced Cleavage of Type II Collagen by Collagenasees in Osteoarthritic Articular Cartliage", J. Clin. Invest., April 1997, Vol. 99, No. 7, pp. 1534-1545.	
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		Wernicke, et al, "Cloning of Collagenase 3 from the Synovial Membrane and Its Expression in Rheumatoid Arthritis and Osteoarthritis", The Journal of Rheumatology, 1996, Vol. 23, No. 4, pp.590-595.	
		Mokrosz, et al, "Structure-activity relationship studies of CNS agents Part 10: 1-Aryl-2-[3-(4-aryl-1-piperazinyl)propyl]-1,4-dihydro-3(2 H)-isoquinalones: Two modes of the interaction with the 5-HT receptor site", Pharmazie, 1994, Vol. 49, pp. 328-333.	
		Reboul, et al "The New Collagenase, Collagenase-3, Is Expressed and Synthesized by Human Chondrocytes but not by Synoviocytes", J. Clin. Invest., Vol. 97, No. 9, May 1996 pp.2011-2019.	

Examiner	Date	
Signature	 Considered	

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<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitut	te for form 1449/PTO			Complete if Known		
Substitut	te 10(10(1)) 1443/F10			Application Number	10/634,180	
INFO	ORMATION	DIS	CLOSURE	Filing Date	August 5, 2003	
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Bunker, et al	
				Art Unit	1624	
	(Use as many she	ets as n	ecessary)	Examiner Name	Rao, Deepak R.	
Sheet	4	of	4	Attorney Docket Number	PC25245A	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Neuhold, et al, "Postnatal expression in hyaline cartilage of constitutively active human collagenase-3 (MMP-13) induces osteoarthritis in mice", J. Clin. Invest., January 2001, Vol. 107, No. 1, pp. 35-44.	
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		Freemont, et al, "In situ zymographic localisation of type II collagen degrading activity in osteoarthritic human articular cartilage", Ann. Rheum. Dis., 1999, Vol. 58, pp. 357-365.	
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